Allotment Assessment and Evaluation Report for
New Mexico Standards and Guidelines for Public Land Health
Dunn Bridge (#627) – August 30, 2010

Permittee/Lessee		Authorization Number currently unauthorized
Livestock Use	Preference AUMs	Allotment: 00627 — Active: to be determined — Suspended
	Period of Use / Kind of livestock	Allotment: Dunn Bridge — Number/Kind: n/a — Season of Use: n/a
	Percent Public Land	AUMs are authorized at 100% public land
Allotment Profile	Physical Description	Allotment 627 is located approximately 3 miles west of Arroyo Hondo in Taos County, New Mexico. Dunn Bridge Allotment is located on the slopes going into the Rio Grande Gorge above John Dunn Bridge. It is dominantly covered by Artemisia tridentata (sagebrush). The elevation is approximately 7000 feet. Three soil types are identified within the BLM parcels. Soils within the parcels are: Rock outcrop, very steep. This soil consists of basalt escarpments mainly found along the Rio Grande Gorge with some layers of terrace sediments. Mean annual precipitation is 12 inches. Runoff is very rapid and erosion hazard is slight. Vegetation is very limited, but perennial native grasses, pinyon pine, and juniper are present. Sedillo-Orthents association, strongly sloping. These soils consist of gravelly loams, with rooting depths over 60 inches. Parent material formed from gravelly alluvium. Average annual precipitation in this area ranges from 11 to 13 inches. Vegetation is characterized by western wheat, blue grama, galleta, Indian ricegrass and sagebrush. Silva-Sedillo association, gently sloping. These soils consist of loams, with rooting depths over 60 inches. Parent material formed from mixed alluvium and eolian material comprises this soil. Average annual precipitation in this area ranges from 11 to 13 inches. Vegetation is characterized by western wheat, blue grama, galleta, and fourwing saltbush.
	Land Status Acreage	BLM: 305 — State: 0 — Private: 0
	Management Objectives	The allotment is under a 'Maintain' ('M') management category. 'M' category allotments are managed to maintain current satisfactory ecological condition.
	Key Forage Species	Western wheat, blue grama, galleta, Indian ricegrass

<table>
<tr><td></td><td>Grazing System</td><td>No system is used at this time due to being unpermitted.</td></tr>
<tr><td>Current Conditions / Management</td><td>Actual Use</td><td>Actual use reports were not submitted since 1989. This allotment has been vacant. Historically 38 AUMs were permitted for this allotment.</td></tr>
<tr><td></td><td>Utilization</td><td>Due to the lack of staff, utilization studies have not been conducted.</td></tr>
<tr><td></td><td>Climate</td><td>The past water year (Oct. 1, 2009 – Sept. 30, 2010) the average temperature has been slightly below average (0 to 1 degrees Fahrenheit) and precipitation above average (0 to 3 inches of precipitation). The winter was slightly wetter (1.5 to 3 inches of precipitation) and was colder (2 to 3 degrees Fahrenheit). The spring was drier (0.75 to 1.5 inches of precipitation) and was colder (1 to 2 degrees Fahrenheit). This should provide below average plant growth for cool season plants. The summer precipitation was below average (0 to 1.5 inches) and slightly warmer (1 to 2 degrees Fahrenheit) which should provide below normal growth for warm season plants.

Global climate change resulting from increasing atmospheric CO_2 levels may accelerate rates of plant extinction and result in shifts in ecosystem structure (species diversity) and function. We anticipate that our monitoring efforts will track vegetation shifts allowing for management modifications to address local range impacts resulting from global climate change.</td></tr>
<tr><td></td><td>Trend</td><td>In 2010 monitoring transects and photo points were placed in the allotment to establish vegetation trend. The full findings are kept in the allotment file at the Taos Field Office, but are summarized below.

<table>
<tr><td>Plot #1</td><td>2010</td></tr>
<tr><td>Ground Cover</td><td>(%)</td></tr>
<tr><td>Bare Ground</td><td>20</td></tr>
<tr><td>cryptograms</td><td>0</td></tr>
<tr><td>gravel</td><td>43</td></tr>
<tr><td>rock</td><td>3</td></tr>
<tr><td>litter</td><td>22</td></tr>
<tr><td>ARTR (Big Sagebrush)</td><td>5</td></tr>
<tr><td>BOGR (Blue Grama)</td><td>7</td></tr>
<tr><td>ARPU (Purple Threeawn)</td><td>1</td></tr>
<tr><td>Species Composition</td><td>(%)</td></tr>
<tr><td>ARTR (Big Sagebrush)</td><td>49</td></tr>
<tr><td>BOGR (Blue Grama)</td><td>41</td></tr>
<tr><td>ARPU (Purple Threeawn)</td><td>5</td></tr>
<tr><td>ELEL (Squirreltail)</td><td>3</td></tr>
<tr><td>GUSA (Snakeweed)</td><td>1</td></tr>
</table>
</td></tr>
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		SPCR (Sand Dropseed) 1 PIED (Pinyon Pine) 1
	Riparian	There are no riparian areas within this allotment.
	Wildlife	Seasonal home ranges in the allotment include those for deer, elk, bear, bobcat, fox, coyote, small mammals and reptiles, bats, raptors, turkey vulture, songbirds, and a variety of insects. Elk especially use this allotment during winter months. Some dietary overlap occurs between wildlife and cattle; however, best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis. This allotment has potential for future projects to enhance wildlife habitat through vegetation treatments and water developments.
	Threatened and Endangered Species	It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment. Special status species that are likely to be found on the allotment (seasonally) include bald eagle and ferruginous hawk.
Findings / Rationale for the New Mexico Standards for Public Land Health		A Rangeland Health Evaluation Matrix was completed on August 30, 2010. This evaluation matrix is from Technical Reference 1734-6 "Interpreting Indicators of Rangeland Health." The actual matrix forms are available within the allotment file. Below is a summation of the information gathered by the on site evaluation. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description. Soil and Site Stability Four indicators were deemed None to Slight, six were deemed Slight to Moderate, zero were deemed Moderate, zero were deemed Moderate to Extreme, and zero were deemed Extreme to Total. Rating: 88%

		Hydrologic Function Four indicators were deemed None to Slight, six were deemed Slight to Moderate, zero were deemed Moderate, zero were deemed Moderate to Extreme, and zero were deemed Extreme to Total. Rating: 88% Biotic Integrity Five indicators were deemed None to Slight, Four were deemed Slight to Moderate, zero were deemed Moderate, zero were deemed Moderate to Extreme, and zero were deemed Extreme to Total. Rating: 91% Overall Rating: 89%
	Upland Standard	*Upland ecological sites are in productive and sustainable condition within the capability of the site. Upland soils are stabilized and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The kind, amount and/or pattern of vegetation provides protection on a given site to minimize erosion and assist in meeting Sate and Tribal water quality standards.* This allotment is meeting the Upland Standard based on the above evaluation and information. Soils appear stable and erosion is no more than expected for the site. Some water and soil movement was noticed, but it is not prominent. Improving plant communities will help to facilitate better infiltration.
	Biotic Communities Standard	*Ecological processes such as hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status , threatened, and endangered species appropriate to site and species.* This allotment is meeting the Biotic Communities Standard based on the above evaluation and information. Artemisia tridentata (sagebrush) is very dominant on the site. Bare ground is slightly higher and litter amount is lower than expected for the site. Historic land management practices and changes in wild fire regimes have probably impacted the current conditions. Vegetation treatments will benefit the plant and wildlife communities on the allotment.
	Riparian Standard	*Riparian areas are in a productive, properly functioning and sustainable condition, within the capability of that site.* The Riparian Standard does not apply to this allotment. No riparian area or vegetation is located within the allotment boundaries.
Conclusion		The New Mexico Standards for public land health are being met; therefore no Determination Document is warranted. No grazing is currently authorized on the allotment. Continued monitoring will help establish future trend. It is recommended

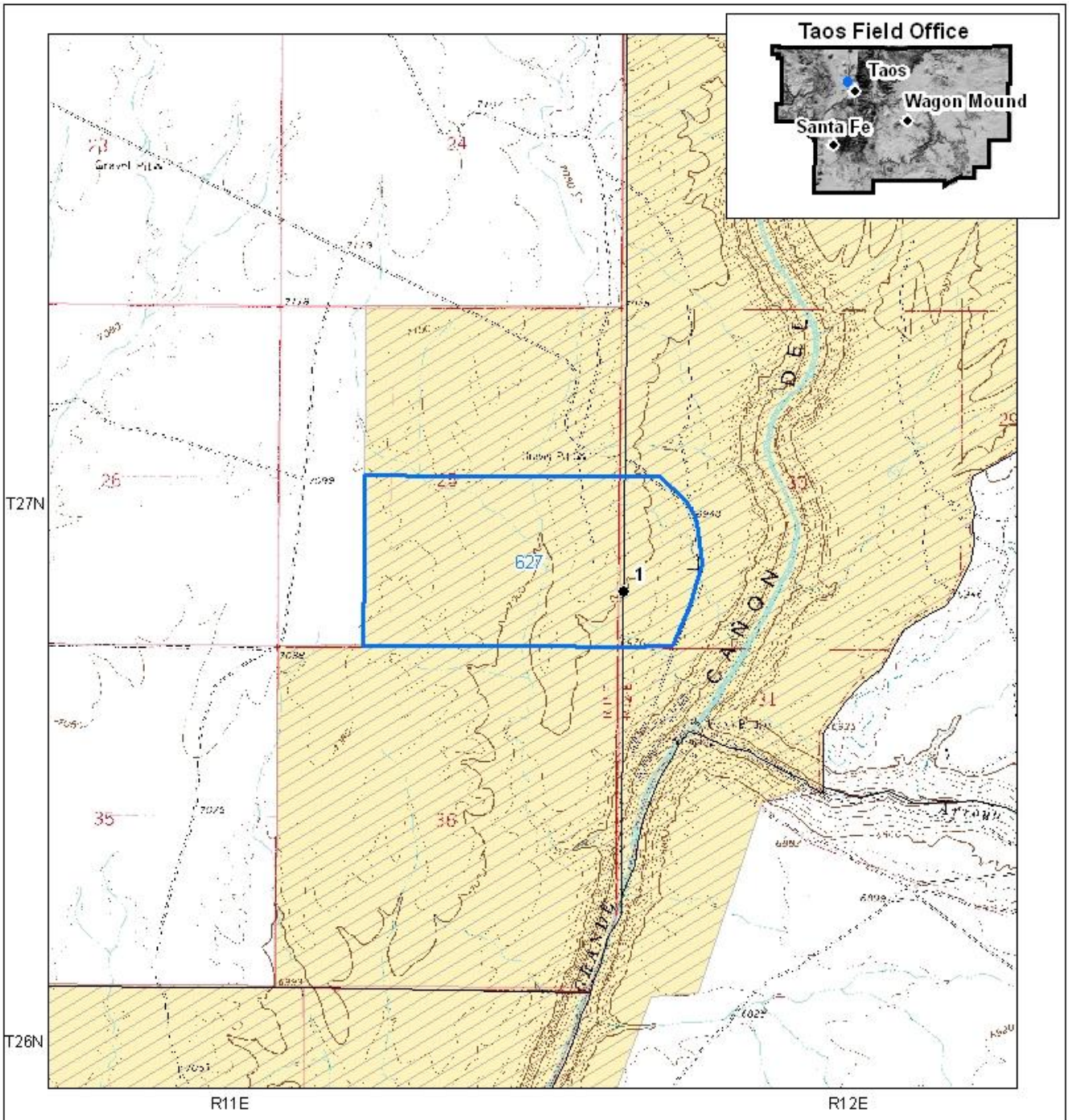
		that vegetation treatments be performed to improve wildlife habitat and promote herbaceous species.

Consultation and Coordination

This Assessment and Evaluation Report has been sent or given to the affected permitee(s) / lessee(s), the interested publics and the following interdisciplinary team members for input and review:

Merril Dicks – Archeologist
Scott Draney – Department of Game and Fish
Greg Gustina – Fish Biologist
Pam Herrera-Olivas – Wildlife Biologist
Tami Torres – Outdoor Recreation Planner
Jacob Young – Rangeland Management Specialist
Paul Williams – Archeologist
Valerie Williams – Wildlife Biologist

This document was prepared by: Derek Trauntvein – Rangeland Management Specialist



Dunn Bridge (627)

0 0.1 0.2 0.4 0.6 0.8 Miles

Legend

- Monitoring Plots
- Allotment Boundary
- Bureau of Land Management
- Private

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7.5' Topos: Arroyo Hondo